

**Notice of Allowability**

Application No.

10/719,039

Examiner

Prieto B.

Applicant(s)

KAPLAN ET AL.

Art Unit

2142

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/26/05 (After-Final).
2. ☒ The allowed claim(s) is/are 15-23,30-34 and 45-49.
3. ☒ The drawings filed on 11/21/03 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**BEATRIZ PRIETO**  
**PRIMARY EXAMINER**

***Examiner's Amendment***

1. An Examiner's Amendment to the record appears below. Should the changes or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

***Title***

2. Pursuant to M.P.E.P. §606.01, this title has respectfully been changed to read as follows:

**-- REDUCTION AND OPTIMIZATION OF OPERATIONAL QUERY EXPRESSIONS APPLIED TO INFORMATION SPACES BETWEEN NODES IN A PUBLISH/SUBSCRIBE SYSTEM --**

***Reason for allowance***

3. The following is the Examiner's statement of Reason for Allowance: the prior art of record teaches the claimed invention substantially as claimed, however failed to teach or suggest individually or in combination; a first operation sequence having a transform operation followed by a select operation, including converting the first operation sequence into a second equivalent operation sequence comprising a select operation followed by a transformation operation, as claimed.

Specifically, the prior art of record failed to teach a select operation (i.e. an expression representing an operation applied to information, also called stream, messages or data) which involves select query operations (i.e. a predicate defined by the expression such as a Boolean valued function of any attribute names and constant) (see disclosure on page 6, lines 23-28), are pushed ahead of transform operations in each sequence converted into an equivalent sequence and further combining with sequential sequence transformations operations (i.e. expression representing an operation applied to information) which involved applying a formula or conversion rule based on a set of constants, and transforming the data elements by performing a conversion of data elements (see disclosure page 7, lines 1-9, and element 50 of Fig. 1), as set forth independent claims 15, 30 and 45. Claims are allowed because of the combination of other limitations and the limitation listed above.

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4. Double patent analysis has been performed with respect to issued patents having common relationship of inventorship and/or ownership with respect to the above-allowed claims, none are found to warrant a double patenting rejection (See enclosed East history search).

5. This applications is a divisional application of application 09/322,521 now patent 6,681,220 issued 01/20/04. A double patenting rejection is not permitted where the claimed subject matter is presented in a divisional application as a result of a restriction requirement made in a parent application under 35 U.S.C. 121 (see MPEP 804). The claims of an application are not the same as those of the above-mentioned patent, they are not barred under 35 U.S.C. 101 - the statutory basis for a double patenting rejection.

6. The method claims are directed to a *statutory* process. Specifically, in this case claims have a practical application in the technological arts, such as arranging operations performable on information in network based system, i.e. an information processing systems and reorganizing information by an automated processing system, this is not disembodied mathematical concept which may be characterized as an abstract idea, but rather a specific machine to produce a useful, concrete, and tangible result. The method recites discrete physical structures or materials may be comprised of hardware or a combination of hardware and software (specs p. 6), at least e.g. the information processing system, producers and subscribers, i.e. network nodes. Claims 30-34 are directed to the system comprising the means for performing the method functions and claims 45-49 are directed to the article of manufacture comprising the computer useable medium having computer readable program code means embodied therein for performing the functions of the method.

### ***Conclusion***

7. Any comments Applicants considers necessary must be submitted no later than the payment of the Issue Fee and to avoid processing delays, should preferable accompany the Issue Fees. Such submission should be clearly labeled “ Comments on Statement of Reasons for Allowance”. In event of any post-allowance papers (e.g. IDS, 312 amendment, petition, etc.), Applicant is exhorted to mail papers to the Production Control branch in Publications or faxed to post-allowance papers correspondence branch at (703) 308-5864 to expedite issuing process or call PUB’s Customer Service if any questions at (703) 305-8497.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Prieto whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:30 to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:


**Box Issue Fee**  
Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(703) 746-4000, (Issue Fee and any Publication fee/payments)

Or:

(703) 305-8283 (for checking on receipt of payment w/Publication)

  
**BEATRIZ PRIETO**  
**PRIMARY EXAMINER**  
August 6, 2005